

## SUNRICHER SR-1009EA

# Sunricher SR-1009EA Constant Voltage Receiver User Manual

Model: SR-1009EA

## 1. PRODUCT OVERVIEW

The Sunricher SR-1009EA is a high-performance 4-channel constant voltage RF receiver designed for controlling various LED lighting applications. It functions as an LED controller, capable of managing single color, dual color, RGB, and RGBW LED strips or fixtures. This receiver operates within a 12-36V DC input range and provides a maximum output of 8 Amps per channel, totaling 32 Amps. It is compatible with a wide range of Sunricher remote controls and wall-mounted controllers, offering flexible control options for multi-zone lighting systems.

Key features include:

- 4-channel, 8A per channel constant voltage RF receiver.
- Wide input voltage range: 12-36V DC.
- Compatibility with various single color, dual color, RGB, and RGBW RF remote controls.
- Supports multi-zone control, allowing separate or synchronized operation of multiple receivers.
- Each receiver can be paired with up to 8 different remote controls.
- Ability to adjust brightness for individual R, G, B, and W channels to create a vast spectrum of colors.
- Can be controlled via iOS or Android mobile applications when paired with a compatible WiFi-RF converter (e.g., Sunricher SR-2818 WiTr).

## 2. PRODUCT DIAGRAM AND CONNECTIONS



**Figure 1:** Sunricher SR-1009EA LED Controller showing DC input, output signal terminals (V+, R-, G-, B-, W-), and a learning switch. The diagram also indicates electrical specifications and operating temperature range.

The diagram above illustrates the physical layout and connection points of the SR-1009EA receiver. It features clearly labeled terminals for power input and LED output, along with a learning switch for pairing with remote controls.

### 3. SETUP AND INSTALLATION

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Before installation, ensure all power is disconnected to prevent electrical shock. This device is designed for indoor use unless an IP67 rated version is specifically used.

#### 3.1 Wiring Connections

1. **DC Input:** Connect your 12-36V DC power supply to the "DC INPUT" terminals. Ensure correct polarity: connect the positive (+) wire of the power supply to the V+ terminal and the negative (-) wire to the V- terminal.
2. **LED Output:** Connect your LED lighting (single color, dual color, RGB, or RGBW) to the "OUTPUT SIGNAL" terminals.
  - For single color LEDs: Connect the positive (+) wire of the LED to V+ and the negative (-) wire to any of R-, G-, B-, or W- (typically W- for white).
  - For dual color LEDs: Connect the common positive (+) wire of the LED to V+ and the individual negative (-) wires for warm white and cool white to two of the R-, G-, B-, W- terminals.
  - For RGB LEDs: Connect the common positive (+) wire of the LED to V+ and the R, G, B negative (-) wires to the R-, G-, B- terminals respectively.
  - For RGBW LEDs: Connect the common positive (+) wire of the LED to V+ and the R, G, B, W negative (-) wires to the R-, G-, B-, W- terminals respectively.

***Note:** Ensure the total current draw of your connected LEDs does not exceed 8A per channel or 32.5A total for the receiver.*

3. **Grounding:** If applicable, connect the ground wire to the designated ground terminal.

#### 3.2 Pairing with Remote Controls

The SR-1009EA receiver can be paired with compatible Sunricher RF remote controls or wall controllers. Follow the specific pairing instructions provided with your Sunricher remote control. Generally, this involves pressing the "Learning Switch" button on the receiver and then initiating the pairing sequence on the remote control within a short timeframe.

Each receiver can be controlled by up to 8 different remote controls, offering flexibility for multi-user or multi-location control.

#### 3.3 App Control Setup (Optional)

To control the SR-1009EA via a mobile application, a Sunricher WiFi-RF converter (e.g., SR-2818 WiTr) is required. Connect the WiFi-RF converter to your home network and pair it with the SR-1009EA receiver according to the converter's instructions. Download the appropriate Sunricher app from your mobile device's app store (iOS or Android) and follow the in-app instructions to add and control your lighting system.

### 4. OPERATING INSTRUCTIONS

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Once the SR-1009EA receiver is properly installed and paired with a remote control or WiFi-RF converter, you can begin operating your LED lighting system.

- **Power On/Off:** Use the designated power button on your paired remote control or within the mobile app to turn the connected LEDs on or off.
- **Brightness Adjustment:** Adjust the overall brightness of the LEDs using the dimmer controls on your remote or app. For RGB/RGBW LEDs, individual R, G, B, and W channel brightness can be fine-tuned to create millions of color variations.
- **Color Selection (RGB/RGBW):** Select desired colors from a color wheel or preset color buttons on your remote/app.
- **Dynamic Modes:** Activate built-in dynamic changing patterns (e.g., fading, jumping, flashing) if supported by your remote control. Some remotes allow customization of these patterns.

- **Zone Control:** If you have multiple SR-1009EA receivers configured into different zones, use the zone selection features on your remote or app to control each zone independently or synchronize them for unified control.

## 5. MAINTENANCE AND CARE

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To ensure the longevity and optimal performance of your Sunricher SR-1009EA receiver, follow these maintenance guidelines:

- **Cleaning:** Gently wipe the device with a soft, dry cloth. Do not use abrasive cleaners, solvents, or harsh chemicals.
- **Environment:** Operate the receiver within its specified temperature range of -20°C to +50°C. Avoid exposing the device to extreme temperatures, high humidity, or direct sunlight.
- **Ventilation:** Ensure adequate airflow around the device, especially if installed in an enclosed space, to prevent overheating.
- **Connections:** Periodically check all wiring connections to ensure they are secure and free from corrosion.

## 6. TROUBLESHOOTING

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If you encounter issues with your SR-1009EA receiver, refer to the following common troubleshooting steps:

- **LEDs Not Responding:**
  - Check if the power supply is connected correctly and providing the correct voltage (12-36V DC).
  - Verify all wiring connections between the power supply, receiver, and LEDs are secure and have correct polarity.
  - Ensure the remote control is paired correctly with the receiver. Re-pair if necessary.
  - Check the batteries in your remote control.
  - Confirm the total load of the LEDs does not exceed the receiver's maximum output (8A per channel, 32.5A total).
- **Intermittent Operation:**
  - Check for loose connections.
  - Ensure the receiver is not exposed to excessive heat or moisture.
  - Minimize interference from other RF devices.
- **Incorrect Color Output (RGB/RGBW):**
  - Verify that the R, G, B, W wires from the LED strip are connected to the corresponding R-, G-, B-, W- terminals on the receiver.
  - Ensure the LED strip type (e.g., common anode) matches the receiver's output configuration.

If the problem persists after following these steps, contact Sunricher customer support or your product supplier for further assistance.

## 7. SPECIFICATIONS

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Parameter	Value
Model Number	SR-1009EA
Manufacturer	Sunricher
Input Voltage (PRI)	12-36V DC

Parameter	Value
Max Input Current (PRI)	32.5A
Output Voltage (SEC)	4 x (12-36V DC)
Output Current (SEC)	4 x 8A
Output Power (SEC)	4 x (96-288W)
Operating Temperature Range	-20°C to +50°C
Weight	150 grams
Compliance	CE, RoHS

## 8. WARRANTY AND SUPPORT



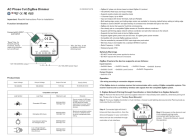
**Warranty Information:** Specific warranty terms for the Sunricher SR-1009EA receiver are typically provided by the retailer or manufacturer at the time of purchase. Please retain your proof of purchase for warranty claims. For detailed warranty policies, refer to the documentation included with your product or visit the official Sunricher website.



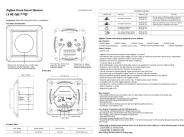
**Customer Support:** For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact your product supplier or the official Sunricher customer support. Contact information can usually be found on the manufacturer's website or on your purchase invoice.

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Information in this manual is subject to change without notice.

## Related Documents - SR-1009EA

	<a href="#">Sunricher DALI/DALI-2 Lighting Control Systems and LED Drivers</a> A comprehensive overview of Sunricher's DALI and DALI-2 lighting control systems, including master controllers, gateways, dimmers, drivers, sensors, and accessories, designed for smart building management and energy efficiency.
	<a href="#">Sunricher SRPC-2309PRO DALI DT8 LED Driver: 200W Constant Voltage Installation and Operation Guide</a> Comprehensive guide for the Sunricher SRPC-2309PRO DALI DT8 LED Driver, covering installation, operation, wiring diagrams, and technical specifications for 200W constant voltage LED lighting systems.
	<a href="#">Sunricher SR-ZG9101SAC-HP AC Phase Cut ZigBee Dimmer: Installation and Operation Guide</a> Comprehensive guide for the Sunricher SR-ZG9101SAC-HP AC Phase Cut ZigBee Dimmer, detailing its features, specifications, safety precautions, ZigBee integration, and wiring instructions for various load types.

 <p>Sunricher Lighting 2025 Control Expert</p>	<p><a href="#">Sunricher Lighting 2025 Control Expert Catalog</a></p> <p>Explore the Sunricher Lighting 2025 Control Expert catalog, featuring a comprehensive range of smart lighting control systems and drivers. Discover solutions for DALI, KNX, Zigbee, Z-Wave, RF/Wi-Fi, and more, designed for commercial, industrial, and smart home applications.</p>
 <p>Sunricher DALI Lighting Control Expert</p>	<p><a href="#">Sunricher DALI Lighting Control Expert - Comprehensive Product Catalog</a></p> <p>Explore Sunricher's extensive range of DALI lighting control solutions, including LED controllers, drivers, dimmers, relays, sensors, gateways, and panels. This catalog details DALI-2 and D4i certified products for commercial, industrial, and smart home applications, highlighting features, specifications, and connectivity options.</p>
	<p><a href="#">ZigBee Knob Smart Dimmer SR-ZG2835RAC User Manual</a></p> <p>User manual for the Sunricher ZigBee Knob Smart Dimmer (Model SR-ZG2835RAC), providing detailed instructions on installation, operation, network pairing, and advanced features for smart home lighting control.</p>